

→ +

+

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

*(use as many sheets as necessary)*

Sheet	1	of	2
-------	---	----	---

10/031,331

January 18, 2002

Akijo YAMADA et al.

Unassigned	1638
------------	------

Unassigned

Attorney Docket Number	31671-176817
------------------------	--------------

[illegible][illegible]

**Examiner  
Signature**

Medine A. Ibrahim

Date Considered

9/14/04

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

**VENABLE**

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
		Application Number	10/031,331		
		Filing Date	January 18, 2002		
		First Named Inventor	Akiyo YAMADA et al.		
		Group Art Unit	Unassigned 1638		
		Examiner Name	Unassigned 17A Thru		
Sheet 2 of 2		Attorney Docket Number	31671-176817		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
MGA ↓	AB	ed. SATOH K., MURATA N., Stress Responses of Photosynthesis Organisms, pages 115-131, Elsevier Science, Amsterdam	
	AC	Molecular Cloning, a Laboratory Manual, Second Edition, Cold Spring Harbor Laboratory Press, 1989 (front page and bibliographic information only)	

Examiner Signature	Medina A. Ibrati	Date Considered	09/14/04
--------------------	------------------	-----------------	----------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

**VENABLE**  
ATTORNEYS AT LAW

531 Rec. CT/PTO 18 JAN 2002

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	Unassigned 10/031331
		Filing Date	January 15, 2002
		First Named Inventor	Akiyo YAMADA et al.
		Group Art Unit	Unassigned 1638
		Examiner Name	Unassigned M. Ibrah
		Attorney Docket Number	31671-176817
Sheet	2	of	4

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
MAI	AB	Mitchell C. TARCZYNSKI et al., "Stress Protection of Transgenic Tobacco by Production of the Osmolyte Mannitol", Science, Vol. 259, January 22, 1993	
	AC	P.B. Kavi KISHOR et al., "Overexpression of $\Delta^1$ -Pyrroline-5-Carboxylate Synthetase Increases Proline Production and Confers osmotolerance in Transgenic Plants", Plant Physiol., 1995, 108, 1387-1394	
	AD	Hidenori HAYASHI et al., "Transformation of Arabidopsis thaliana with the codA gene for choline oxidase; accumulation of glycinebetaine and enhanced tolerance to salt and cold stress," The Plant Journal, 1997, 12, Pages 133-142	
	AE	Atsushi SAKAMOTO et al., "Metabolic engineering of rice leading to biosynthesis of glycinebetaine and tolerance to salt and cold", Plant Molecular Biology, 38, pages 1011-1019, 1998	
	AF	Gynheung AN "High Efficiency Transformation of Cultured Tobacco Cells", Plant Physiol, 1985, 79, pages 568-570	
✓	AG	Tetsuro MIMURA et al., "Efficient Callus Initiation from Leaf of Mangrove Plant, Bruguiera sexangula in Amino Acid Medium: Effect of NaCl on Callus Initiation, J. Plant Res., Vol. 110, No. 1097, 1997, pages 25-29	
✓	AH	Tetsuro MIMURA et al., "NaCl-Dependent Growth, Ion Content and Regeneration of Calluses Initiated from the Mangrove Plant, Bruguiera sexangula", J. Plant Res., 110, pages 31-36, 1997	
✓	AI	Elena SHEVELEVA et al., "Increased Salt and Drought Tolerance by D-Ononitol Production in Transgenic Nicotiana tabacum L.", Plant Physiol., 1997, 115, pages 1211-1219	
✓	AJ	"Expression of a Late Embryogenesis Abundant Protein Gene, HVA1, from Barley Confers Tolerance to Water Deficit and Salt Stress in Transgenic Rice", Plant Physiol., 1996, 110, pages 249-257	
	AK	David W. LEUNG et al., "A Method For Random Mutagenesis Of A Defined DNA Segment Using A Modified Polymerase Chain Reaction", A Journal of Methods In Cell And Molecular Biology, Vol. 1, No. 1, August 1989, pages 11-15	
✓	AL	Denise MUHLRAD et al., "A Rapid Method for Localized Mutagenesis of Yeast Genes", Yeast Vol. 8, pages 79-82, 1992	

Examiner Signature	Medina A. Ibrah	Date Considered	09/14/04
--------------------	-----------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

531 Rec'd PCT/PTO 18 JAN 2002

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	Unassigned 10/031331
		Filing Date	January 15, 2002
		First Named Inventor	Akiyo YAMADA et al.
		Group Art Unit	Unassigned 1638
		Examiner Name	Unassigned M. Ibrahim
Sheet 3 of 4	Attorney Docket Number	31671-176817	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
MAI	AM	Willem P.C. STEMMER, "DNA shuffling by random fragmentation and reassembly: In vitro recombination for molecular evolution", Proc. Natl. Acad. Sci. USA, Vol. 91, pages 10747-10751, October 1994	
	AN	James A. OSTREM et al., "Salt Stress Increases the Level of Translatable mRNA for Phosphoenolpyruvate Carboxylase in Mesembryanthemum crystallinum", Plant Physiol. 1987, 84, pages 1270-1275	
	AO	Greene Publishing Associates and Wiley-Interscience, "Current Protocols In Molecular Biology", 1987	
	AP	"Continuous cultures of fused cells secreting antibody of predefined specificity", Nature Vol. 256, pages 495-497, August 7, 1975	
	AQ	Danuta KOZBOR et al., "The production of monoclonal antibodies from human lymphocytes", Immunology Today, vol. 4, No. 3, 1983	
	AR	S.P.C. Cole, "Monoclonal Antibodies and Cancer Therapy", pages 77-96, 1985	
	AS	Hiroshi NOJIMA, "Idenshi Library no Sakuseihoo" (Methods of preparing gene library), ed., Yoodo-sha, 1994	
	AT	"Shokubutu saiboo koogaku nyumon (Introduction to plant cell engineering), Japan Scientific Societies Press, 1998	
	AU	Yukoh HIEI et al., "Efficient transformation of rice (Oryza sativa L.) mediated by Agrobacterium and sequence analysis of the boundaries of the T-DNA", The Plant Journal, 6(2), pages 271-282, 1994	
	AV	"Model shokubutu no jikken protocol" (Experimental Protocols for plant models), Shunjin-sha, 1996	
✓	AW	"Shokubutu soshiki baiyoo no gijutu" (Technologies for culturing plant tissues), Asakura-shoten, 1983	

Examiner Signature	Medina A. Ibrahim	Date Considered	09/14/04
--------------------	-------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW

531 Rec'd PGT/PTO 18 JAN 2002

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;">Unassigned <b>16/031331</b></td> </tr> <tr> <td>Filing Date</td> <td>January 15, 2002</td> </tr> <tr> <td>First Named Inventor</td> <td>Akiyo YAMADA et al.</td> </tr> <tr> <td>Group Art Unit</td> <td>Unassigned <b>1638</b></td> </tr> <tr> <td>Examiner Name</td> <td>Unassigned <b>M. Ibrahim</b></td> </tr> <tr> <td>Attorney Docket Number</td> <td>31671-176817</td> </tr> </table>		Application Number	Unassigned <b>16/031331</b>	Filing Date	January 15, 2002	First Named Inventor	Akiyo YAMADA et al.	Group Art Unit	Unassigned <b>1638</b>	Examiner Name	Unassigned <b>M. Ibrahim</b>	Attorney Docket Number	31671-176817
Application Number	Unassigned <b>16/031331</b>														
Filing Date	January 15, 2002														
First Named Inventor	Akiyo YAMADA et al.														
Group Art Unit	Unassigned <b>1638</b>														
Examiner Name	Unassigned <b>M. Ibrahim</b>														
Attorney Docket Number	31671-176817														
Sheet	4	of	4												

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<b>MAI</b>	<b>AX</b>	Richard A. Jefferson, "GUS fusions: 8-glucuronidase as a sensitive and versatile gene fusion marker in higher plants", The EMBO Journal, vol. 6, no. 13, pages 3901-3907, 1987	

Examiner Signature	<b>Medina A. Ibrahim</b>	Date Considered	<b>09/14/04</b>
-----------------------	--------------------------	--------------------	-----------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**VENABLE**  
ATTORNEYS AT LAW